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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,214

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Jorg Rademann

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02/27/2009

THE NATH LAW GROUP
112 South West Street
Alexandria, VA 22314

EXAMINER

LISTVOYB, GREGORY

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

02/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,214	Applicant(s) RADEMANN, JORG	
	Examiner GREGORY LISTVOYB	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 12-38 is/are pending in the application.
- 4a) Of the above claim(s) 19-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-18, 31-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 12-18 and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimokawa (US 4708821), herein Shimokawa herein in view of Boussouira et al (US 2003/0190335) herein Boussouira or Hird (WO 2000/55258) herein Hird.

Shimokawa teaches polyethyleneimine-based cross-linked gel for cosmetic applications, meeting the limitations of claims 2-7 and 10 (see Abstract, Column 4, line 5), which is slightly crosslinked (1-15%, see Column 3, line 50, meeting the new limitation of claim 1, claiming less than 30% of the heteroatoms are connected to linking groups) with dialdehydes, terephthalaldehyde, epoxy compounds, etc (see Column 4, line 25), meeting the limitations of claims 12-15.

Regarding claim 8, Shimokawa teaches a polyethyleneimine with primary amino groups (see Column 4).

Shimokawa does not teach linear polyethyleneimine.

Boussouira and Hird both teach linear polyethyleneimine.

Boussouira teaches branched and linear cross-linked polyethyleneimines (see lines 0070, 0074 and Claim 1) for cosmetic compositions (Abstract and Claim 1).

Therefore, equivalence of linear and branched polyethyleneimines used for the same purposes is established.

It is a prima facie obvious to add a known ingredient for its known function (see *In re Linder* 173 USPQ 356).

Therefore, it would have been obvious to a person of ordinary skills in the art to interchangeably use linear PEI and branched PEI for cosmetic compositions, since it is known ingredient for its known function.

Regarding Claim 16, Shimokawa does not teach dihalohalides as a cross-linking agent.

Boussouira teaches 1,6 dichlorohexane (see line 0107) as a cross-linker along with epoxides, which disclosed by Shimokawa.

Therefore, equivalence of 1,6 dichlorohexane and epoxides used for the same purposes as cross-linking agents are established.

It is a *prima facie* obvious to add a known ingredient for its known function (see *In re Linder* 173 USPQ 356).

Therefore, it would have been obvious to a person of ordinary skills in the art to use 1,6 dichlorohexane as a cross-linking agent, since it is known ingredient for its known function.

Hird teaches a polymeric compound, based on linear polyethyleneimine of formula $(R-X)_n$, where R is alkylene and X is imine (see Abstract, page 10 which meets the limitations of Claims 5,6,7 and 10). The composition comprises above linear cross-linked polymer (see Page 41, lines 10 and 19). Hird teaches that his polymer can be use for consumer applications as an adsorbent (see page 1).

Hird teaches that his polyethyleneimine-based cross-linked gel can be linear and branched. (see page 10). Therefore, linear or branched polyethyleneimine scan be equally used as adsorbent in consumer applications.

The selection of a known material based on its suitability for its intended use supported a *prima facie* obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945) , 325 U.S. at 335, 65 USPQ at 301, see also also

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In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960), *Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988) and MPEP 2144.07.

Therefore, it would have been obvious to a person of ordinary skills in the art to interchangeably use linear and branched polyethyleneimine gels in Shimokawa compositions, since they are known material based on its suitability for their intended use.

Regarding Claim 2, Hird teaches that the polymer is insoluble and it is used as anion-exchange adsorbent (see page 41, line 18).

In reference to Claims 3-4 and 12, Hird teaches that his polymer is cross-linked via heteroatom (see page 41, line 10) with ethylene glycol diglycidyl ether (epoxide) by relatively low degree of cross-linking (see page 10, line 20).

Regarding Claim 11, Hird teaches a cross-linked polyalylamine, which is polyvinylamine (see page 10).

Regarding Claim 17, Hird does not expressly teach values of loading with amino functionalities.

However, since Hird's polyethyleneimine is linear and slightly cross-linked, it has the same structure as polymer, disclosed in the Application.

Therefore, Hird's polymer values of loading with amino functionalities are expected to be equal to ones of the Application.

Regarding Claim 18, Hird does not teach the polymer in form of resin micro pellets.

However, he teaches mixed bed ion-exchange adsorbent polyethyleneimine (see page 45) in form of grounded and sieved uniform particles.

The position is taken that the above particles are expected to be an equivalent to micro pellets claimed in claim 18.

Response to Arguments

Applicant's arguments with respect to claims 1-9 and 12-18 have been considered but are moot in view of the new ground(s) of rejection.

Rejection based on 35 USC 112(1) and 112(2) have been withdrawn due to amendments to the claims 1-9 and 12-18.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY LISTVOYB whose telephone number is (571)272-6105. The examiner can normally be reached on 10am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rabon Sergent/
Primary Examiner, Art Unit 1796

GL